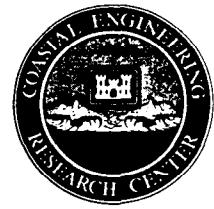




Coastal Engineering Technical Note



AVAILABILITY OF NDBC/NOAA DATA AT WES

PURPOSE: To describe the organization and accessibility of National Data Buoy Center (NDBC), National Oceanic and Atmospheric Administration (NOAA) data available at the U.S. Army Engineer Waterways Experiment Station (WES).

BACKGROUND: NDBC supports a program of meteorological and oceanographic measurements from buoys and fixed platform (Coastal-Marine Automated Network, CMAN) stations along the coastlines of the United States. These data are routinely used by the Coastal Engineering Research Center (CERC), and therefore, are included in the CERC coastal database. A complete description of the data available can be retrieved from the Mass Storage Facility (MSF) at WES (`/cewes2/a/h2crodm1/noaa/NODC-F291.doc`). An abbreviated set of the most commonly used parameters from this database (wind speed, wind direction, significant wave height, average wave period, and dominant wave period) is available via ftp access to `bigfoot.wes.army.mil` (see CETN I-23).

DATA ARCHIVE: The complete NDBC data set from 1975 to 1994 is available on CD-ROM from the National Oceanographic Data Center (NODC). At CERC, this data set is available from the Wave Information Study (WIS). Additional CD's will be added, when available from NODC. NDBC data from 1994 to the present are available on the MSF at WES. As WIS obtains these data on CD-ROM, they will be removed from the MSF. Only current data, and data not yet on CD-ROM, will be retained on the MSF. Access to NDBC/NOAA data is described in the following sections.

DATA ACCESS (CD-ROM): All NDBC data (1975-1994) contained on CD-ROM are organized geographically by station and stored in the original NODC *File Type F291* format in ASCII files for a DOS-based PC. The *File Type F291* record format description is available on each NODC CD-ROM in the file named `BUOYFORM.TXT`. These ASCII files can be transferred to a Unix-based workstation or mainframe using ftp with the mode set to ASCII. The Unix command `dos2unix` can be used, if after-the-fact conversion is required.

DATA ACCESS (MSF): NDBC data stored on the MSF at WES are organized chronologically by year and month and stored in migrated tape archive (**tar**) files. Files retrieved from the MSF and restored will be ASCII files written in the original NODC *File Type F291* format. The filesystem/path to access the monthly data files stored on the MSF and their format information file is given below. Note that the data file names have a **.tar** ending tag. Knowledge of Unix commands for migrated file retrieval and restoring **tar** files is necessary to access the NDBC/NOAA data files stored on the MSF. Users are cautioned that this is an interim archive and subject to change.

/cewes2/a/h2crodm1/noaa/NODC-F291.doc (documentation file)

/cewes2/a/h2crodm1/noaa/noaa94jan.tar (data file)

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/cewes2/a/h2crodm1/noaa/noaa95aug.tar (data file)

By default, a user with an account on either the Cray-YMP or Cray-C90 should have an account on the MSF with the same user ID name and password. (NOTE: A one-time initial login to the user's individual MSF account is required before data on the NOAA library user ID can be accessed.)

Execute initial MSF login: **telnet mss.wes.army.mil** (NOTE: mss)
Follow instructions regarding password.
MSF computer will execute automatic exit.

Execute login to Cray-YMP: **telnet larry.wes.army.mil**
 or
Execute login to Cray-C90: **telnet pk.wes.army.mil**

Change file system: **cd /tmp**
Create working directory: **mkdir data**
Change to working directory: **cd data**
Retrieve file from MSF: **msfget /cewes2/a/h2crodm1/noaa/noaa95aug.tar**
Restore tar file: **tar xvf noaa95aug.tar**

When a **tar** file is expanded, a directory containing all available NOAA stations for a particular month and year will be created under the working directory. The user can then select and move file(s) of interest to the working directory and delete the unnecessary restored directory and remaining files.

SECURITY: User access to all data files is restricted to "read only." Files must be copied to user-defined disk space on the Cray-YMP or Cray-C90 before any editing or extracting, as required by the user, can be done.

DOCUMENTATION: A complete description of the NODC *File Type F291* record format is given in the information file **NODC-F291.doc** on the MSF (see DATA ACCESS MSF). The *File Type F291* record format description is also available on each NODC CD-ROM in the file named **BUOYFORM.TXT** (see "DATA ACCESS CD-ROM").

DISCLAIMER: Access to NDBC/NOAA data described here is not intended to replace normal NDBC/NOAA data distribution procedures. The official archive and distribution centers for NDBC/NOAA data are listed below.

National Oceanographic Data Center (NODC)
1825 Connecticut Avenue, NW
Washington, DC 20235
(202) 606-4549

National Climatic Data Center (NCDC)
Federal Building
Asheville, NC 28801
(704) 259-0682

ADDITIONAL INFORMATION: Rebecca M. Brooks (601-634-2406) or via E-mail: diamond@larry.wes.army.mil at the Coastal Oceanography Branch, Coastal Engineering Research Center, WES (CEWES-CR-O).

REFERENCES:

"Coastal Engineering Data Retrieval System (CEDRS)," Coastal Engineering Technical Note (CETN I-23). Coastal Engineering Research Center, U.S. Army Engineer Waterways Experiment Station. May 1995.

"NDBC Data Availability Summary," Publication 1801-24-02, Rev. J. Stennis Space Center, National Data Buoy Center, National Oceanic and Atmospheric Administration, U.S. Department of Commerce. August 1995.